



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/175,522	10/20/1998	PAUL STEPHAN BEDROSIAN	L0012/7001	7010
26291	7590	09/13/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN L.L.P. 595 SHREWSBURY AVE, STE 100 FIRST FLOOR SHREWSBURY, NJ 07702			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/175,522

Applicant(s)

BEDROSIAN, PAUL STEPHAN

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 9-15, 18-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 06/23/2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong et al (US Patent No. 6,477,154) in view of Moulton et al (US Patent No. 6,487,262).

Regarding claim 1, referring to Figure 2, Cheong discloses an apparatus for providing synchronization signals to a telecommunications network comprising:

a central synchronization management unit (i.e., micro base station controller mBSC, Fig. 2) for distributing synchronization signals (i.e., the reference clock signals, for example 10Mhz, generated from the GPS receiver 212 of mBSC, Fig. 2), and

a synchronization distribution unit (i.e., optical splitter or optical node 214, Fig. 2) connected to receive synchronization signals from the central synchronization management unit (i.e., mBSC, Fig. 2) and to distribute the signals to at least one network element (i.e., micro base station mBS 216, 221 and 225, Fig. 2)(see col. 5, line 19-67, col. 6, lines 1-27 and lines 54-67 and col. 7, lines 1-24).

Art Unit: 2633

Cheong differs from claim 1 in that he fails to teach the synchronization distribution unit including a timing recovery system configured to performed timing recovery on the synchronization signals received from the central synchronization management unit. However, Moulton in US Patent No. 6,487,262 teaches the synchronization distribution unit (i.e., BNU, Fig. 2) including a timing recovery system (i.e., PLL 248) configured to performed timing recovery on the synchronization signals received from the central synchronization management unit (i.e., ODU 238, Fig. 2)(col. 4, lines 53-67 and col. 5, lines 1-16). Therefore, it would have been obvious to one having skill in the art at the time of the invention was made to incorporate the synchronization distribution unit including a timing recovery system configured to performed timing recovery on the synchronization signals received from the central synchronization management unit as taught by Moulton in the system of Cheong. One of ordinary skill in the art would have been motivated to do this since Moulton suggests in column 4, lines 53-67 and col. 5, lines 1-16 that using such a timing recovery system has advantage of allowing retiming and reshaping the signal and to reduce the distortion of signal and reducing the signal error.

Regarding claim 2, Cheong further teaches the synchronization signals are optical signals (Fig. 2).

Regarding claim 3, Cheong further teaches the central synchronization management unit comprises an input port for receiving a clock signal and an optical processor for producing optical clock signals (Fig. 2).5.

Regarding claims 4 and 16, Cheong differs from claims 4 and 16 in that he fails to teach a processor for retiming clock signals received at the input port. However, Moulton teaches a processor for retiming clock signals received at the input port (Figs. 1 and 2, col. 3, lines 35-67, col. 4, lines 1-67 and col. 5, lines 1-20). Therefore, it would have been obvious to one having skill in the art at the time of the invention was made to incorporate the processor for retiming clock signals received at the input port as taught by Moulton in the system of Cheong. One of ordinary skill in the art would have been motivated to do this since Moulton suggests in column 3, lines 35-67, col. 4, lines 1-67 and col. 5, lines 1-20 that using such a processor for retiming clock signals received at the input port has advantage of allowing retiming and reshaping the signal and to reduce the distortion of signal and reduce the signal error.

4. Claims 5-8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong et al (US Patent No. 6,477,154) in view of Moulton et al (US Patent No. 6,487,262) and further in view of Walter et al (US Patent No. 6,418,151).

Regarding claims 5 and 17, the combination of Cheong and Moulton differs from claims 5 and 17 in that it fails a plurality of clock sources. However, Walter teaches a plurality of clock sources (i.e., a plurality of clock sources such as PRC1 and PRC2, Figs. 2-4, col. 1, lines 5-62, col. 2, lines 20-67 and col. 3, lines 1-56). Therefore, it would have been obvious to one having skill in the art at the time of the invention was made to incorporate the plurality of clock sources as taught by Walter in the system of the combination of Cheong and Moulton. One of ordinary skill in the art would have been

Art Unit: 2633

motivated to do this since Walter suggests in column 1, lines 5-62, col. 2, lines 20-67 and col. 3, lines 1-56 that using such the plurality of clock sources have advantage of allowing increasing the availability of the clock sources to provide better protection against external influences and to guarantee the highest availability.

Regarding claim 6, the combination of Cheong, Moulton and Walter teaches the central synchronization management unit selects one of a plurality of input clock signals as a primary clock output signal (i.e., PRC1 of Walter, Fig. 4).

Regarding claim 7, the combination of Cheong, Moulton and Walter teaches the central synchronization management unit produces a plurality of optical clock output signals (Fig. 2 of Cheong and Fig. 4 of Walter).

Regarding claim 8, Cheong further teaches the synchronization distribution unit comprises a passive optical input port configured to receive an optical clock signal and to split the optical clock signal into two signals, routing one of the split signals to an optical output (Fig. 2 of Cheong).

Allowable Subject Matter

5. Claims 9-15 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-21 are have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3035. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan
Patent Examiner
Art Unit 2633

09/01/04